Facts about the Proposed Kinder Morgan / Tennessee Gas Pipeline (TGP) pipeline*

The TGP pipeline proposal:

- Kinder Morgan / TGP is proposing a new high pressure[1] natural gas transmission pipeline from the Marcellus shale gas fields in Pennsylvania[2] through Berkshire, Hampshire and Franklin counties in western Mass., through southern NH, and into Dracut, MA,[3] to connect there to the Maritimes & Northeast Pipeline to Canada.[4]
- Marcellus shale gas is largely produced through hydraulic fracturing ("fracking").[5]

Climate Change:

- Dangerous climate change is heavily driven by carbon dioxide (CO2) and other heat-trapping greenhouse gases from fossil fuels: coal, oil and natural gas.[6]
- If built, the TGP gas pipeline would likely be in service 50 years or more,[7] helping lock in more fossil fuel burning for over half a century.[8]
- Natural gas is mostly methane,[9] a powerful greenhouse gas.[10] Natural gas has climate change impacts both as methane, when it leaks from pipelines and drilling sites, and when it is burned and turns to CO2.[11]
- Pound for pound, methane has more than 20 times the greenhouse gas impact of CO2 over a 100-year period.[12]
- Numerous studies have shown that gas drilling sites[13] and gas pipelines[14] leak methane.[15]

Health Risk:

- Fracking typically injects underground millions of gallons of water for one gas well,[16] to force cracks into the shale rock, to extract the gas.[17] To produce this fracking fluid, the water is mixed with a variety of chemicals,[18] some of them toxic or carcinogenic.[19] These chemicals get into the gas produced.[20]
- The Occupational Safety and Health Administration (OSHA) has noted that biocides such as aldehydes, and other frequently used fracking chemicals, are toxic, and issued guidance to employers to help minimize exposures for fracking personnel.[21]

Environmental Impact and Risks Along the Pipeline Route:

- The 188-mile long pipeline[22] will require a permanent 50 foot wide right of way with an additional 50-75 ft. width during construction,[23] impacting miles of forest land, farm land, wetlands, and residential communities,[24] and state-protected Article 97 conservation land.[25]
- Gas transmission pipelines have had hundreds of releases, ruptures,[26] fires, explosions,[27] and other "incidents," causing fatalities and doing over a billion dollars in property damage.[28]

Need / Alternatives:

- A controversial Dept. of Energy Resources / Synapse "Low Gas Demand Analysis" estimated that Massachusetts would be short 0.6 billion to 0.9 billion cubic feet of gas per day (Bcf/d) on peak demand days, unless more pipeline capacity is built.[29] Environmentalists dispute this need.[30]

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* **Also known as the proposed "Northeast Energy Direct" pipeline project.**

- In looking at possible alternatives to the pipeline, by its own acknowledgement, the Low Gas Demand Analysis did not:
  - consider the environmental costs of building the pipeline [31]
  - consider the environmental costs of drilling the gas, such as those related to fracking[32]
  - consider any alternative energy source it estimated would cost more than piped gas[33]
  - consider pipeline investments' potential for slowing of alternative energy growth [34]
  - assume that Massachusetts would comply with its own Global Warming Solutions Act (GWSA),[35] nor factor in the avoided carbon cost of GWSA compliance for alternatives[36]
  - factor in non-energy benefits for alternative energy, including improved health, reduced healthcare costs and new jobs related to alternative measures[37]
- The pipeline couldn't fill any Massachusetts energy gaps for at least 3 ½ years. If built, it wouldn't be finished until late 2018.[38]

Gas likely for export:

- The TGP pipeline would transport up to 2.2 billion cubic feet of gas per day (Bcf/d),[39] far more than even the 0.6-0.9 Bcf/d of gas Synapse estimated might be needed. It's likely much of that extra 1.3 to 1.6 Bcf/d of TGP pipeline gas would be exported abroad.
- The TGP Pipeline would connect the Pennsylvania Marcellus shale-gas fields[40] to the Maritimes & Northeast Pipeline (M&NP),[41] whose flow direction is being proposed for reversal, to coastal Canada instead of from it, potentially making this gas available for export as liquefied natural gas (LNG) there.[42] The *Pittsburgh Post-Gazette* reported that five LNG export terminals are being planned for Canada's Atlantic coast, and that it "is likely all would need natural gas from the Marcellus [fields] . . . ."[43] Three of these exporters, Pieridae Energy,[44] Bear Head LNG,[45] and Saint John LNG,[46] have already filed applications to export US gas through a reversed M&NP.
- Kinder Morgan told FERC: "Potential Atlantic Canada customers [for the TGP Pipeline project] include . . . liquefied natural gas ('LNG') export projects."[47]
- Kinder Morgan told investors: "Kinder Morgan's unparalleled natural gas footprint is . . . [w]ell-positioned relative to major trends (Marcellus [Shale fields], exports to Mexico, LNG exports . . .)." [48]

Economics:

- TGP pipeline cost: $1.75 billion - $6 billion (estimates vary)[49]
- New England Governors had proposed a tariff or tax on electricity ratepayers to pay for pipeline construction. [50] Former Governor Patrick backed out, but now our new Governor, Charlie Baker, has revived the possibility.[51] Under such a plan, the New England rate-paying public could be taxed to help build a pipeline privately owned by the subsidiary of a $125-billion company,[52] Kinder Morgan.
- The TGP Pipeline would create 3,000 (temporary) construction jobs, says Kinder Morgan.[53] By contrast, one UMass study estimated that spending $2 billion on energy efficiency and renewable energy projects would create over 22,000 jobs.[54]

Climate Action NOW/350MASS – Amherst No Pipeline Resolution committee

For an annotated version of this flyer showing sources for facts, go to: [not yet posted] 3/14/15

[annotations for a prior, similar version, are posted at:
http://184.154.244.76/~climat89/wp-content/uploads/2015/03/Facts-about-TGP-Pipeline1.pdf]